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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,373	09/27/2006	Jan M. Krans	GB 040081	7715
24737 7590 10/02/2009 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER MATZEK, MATTHEW D				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
10/02/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/599,373

**Applicant(s)**

KRANS ET AL.

**Examiner**

MATTHEW D. MATZEK

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-17 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 27 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-4, 7-12, 14, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Taylor (US 6,155,120).

a. Taylor discloses a textile form touch sensor comprising first and second outer conductive layers, and a third intermediate layer, which comprises a non-conductive mesh (claimed textile) and piezoresistive material (col. 5, lines 38-58). The piezoresistive material is applied to the mesh layer by coating followed by curing (col. 9, lines 1-22). Claims 2 and 3 are anticipated as the piezoresistive material is contained within regions or blocks that are laterally or longitudinally separated (col. 6, lines 11-18; Figures 1 and 4). The layers of the touch sensor are bonded together at their periphery where no piezoresistant material is present (col. 5, lines 45-58). Claim 7 is anticipated as the electrodes of the first and second outer layers (31, 32) are oriented perpendicularly to one another (col. 8, lines 36-57). Figure 14 illustrates the connection of the electrodes to electronic circuitry.

b. Claims 9 and 10 are anticipated as the mesh layer is coated with piezoresistive material prior to the mesh layer being located intermediate to the first and second outer conductive layers (col. 17, line 65-col. 18, line 15). Claims 11 and 12 are rejected as the coating of the piezoresistive material is non-continuous and located in defined blocks

(col. 6, lines 11-18). Claim 14 is rejected as the layers of the touch sensor are bonded together at their periphery where no piezoresistant material is present (col. 5, lines 45-58). Claims 16 and 17 are anticipated as the electrodes of the first and second outer layer are oriented perpendicularly to one another and are connected to electronic circuitry.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 5, 6, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taylor (US 6,155,120).

- a. Taylor discloses the bonding of the layers of the textile form touch sensor together at their periphery. Within the intermediate layer are segregated regions comprising piezoresistive material bounded by the fibers of the fabric mesh (col. 5, lines 38-58). Each region forms an individual normal force or pressure sensor; when taken together they form an array of sensors.
- b. Taylor fails to teach the joining of the first, second and third layers together in a series of straight lines running between the defined blocks of piezoresistive material. It

would have been obvious to one of ordinary skill in the art to have bonded the first, second and third layers of Taylor together along the straight lines of the intermediate mesh layer with the motivation of providing greater structural integrity to the article afforded by additional points of adhesion when compared to just bonding at the layers' periphery. These additional lines of bonding would not interfere with the functioning of the individual sensors as the adhesion occurs only at locations free of piezoresistive material.

c. Taylor teaches the inclusion of fourth and fifth layers to flank the three layer touch sensor (col. 13, lines 21-32), but fails to disclose the use of visible indications on either of the additional layers. A primary use of the touch sensor of Taylor is to map the pressures exerted on the bottom of the foot by a shoe (col. 1, lines 7-13). It would have been obvious to one of ordinary skill in the art to have added a visible indication on the top of the fourth layer that would come in contact with a foot as the indication would direct the sensor user to properly align his foot with the sensor.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW D. MATZEK whose telephone number is (571)272-2423. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on 571.272.1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew D Matzek/  
Examiner, Art Unit 1794